No. 652,327. Patented June 26, 1900.

W. N. PARKES.

SEWING MACHINE.

(Application filed June 22, 1898.)

(No Model.) 4 Sheets—Sheet 1.

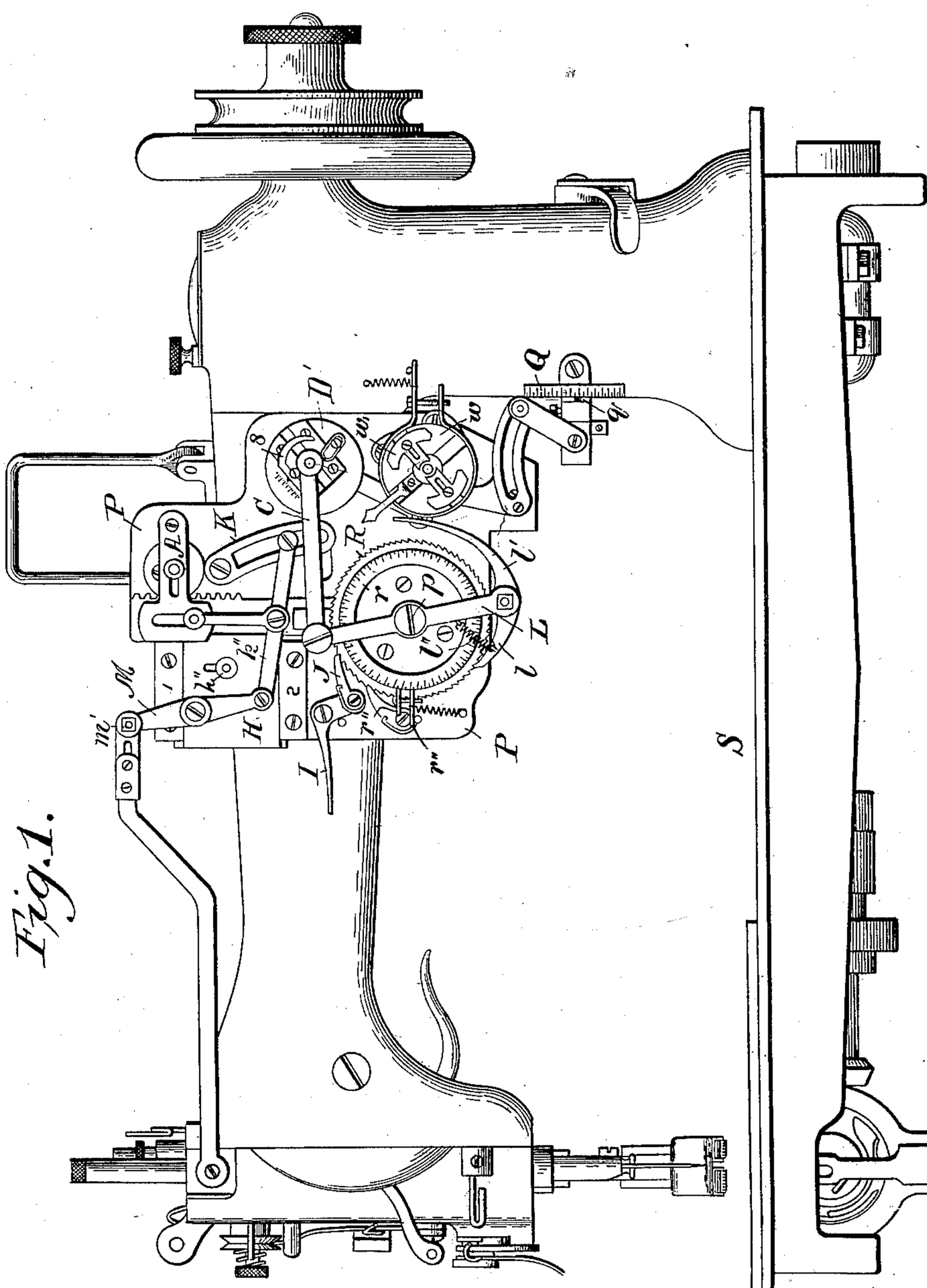

Fig. 1.

Witnesses.

J. B. McGirr.

Herman Meyer

Inventor.

William N. Parkes

By William R. Baird

His Attorney.

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(No Model.) 4 Sheets—Sheet 2.

Fig. 2.

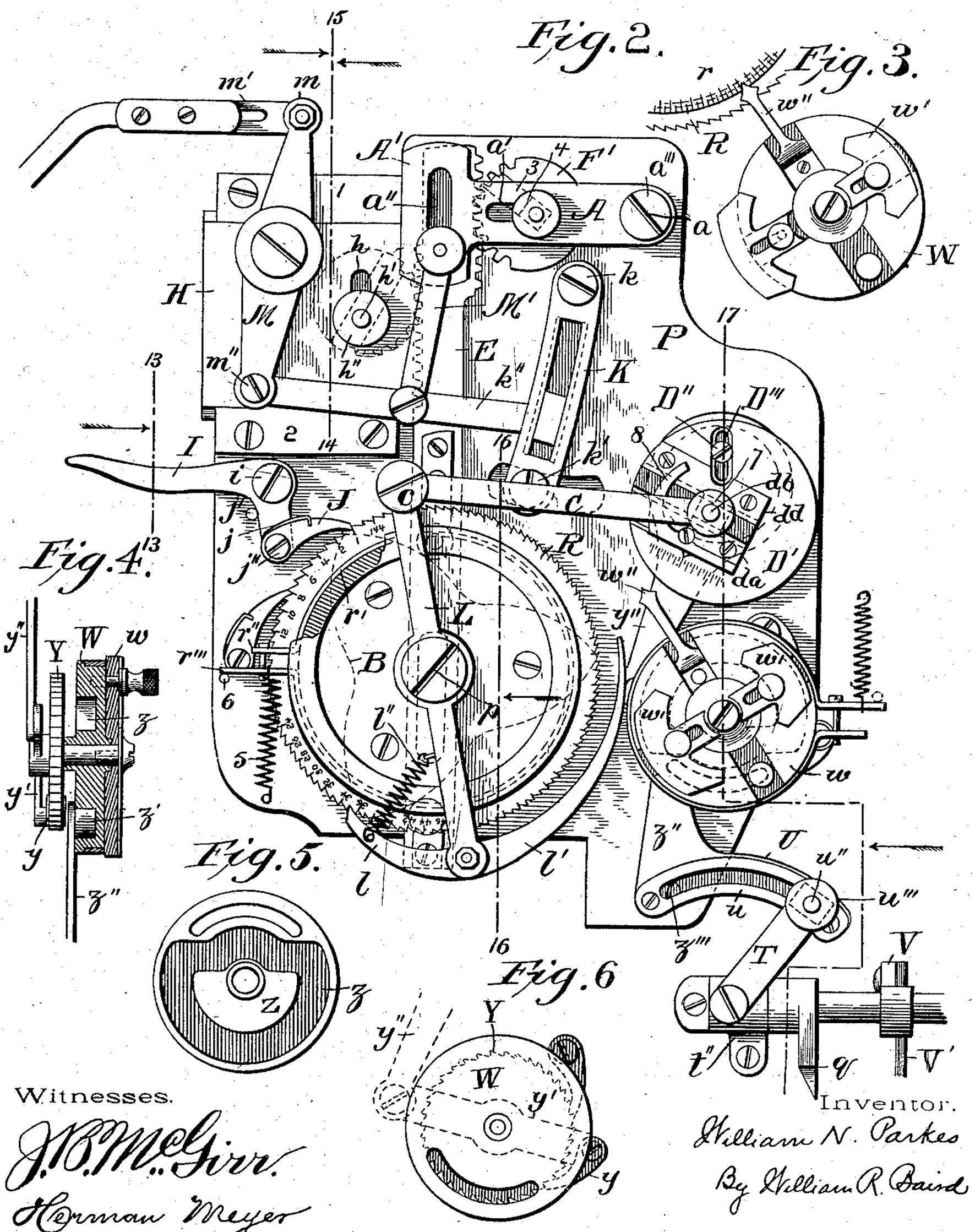

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6

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(No Model.) 4 Sheets—Sheet 3.

Fig. 10.

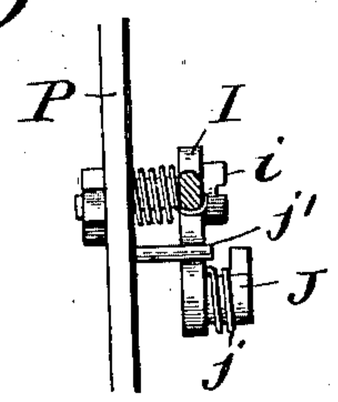


Fig. 16.

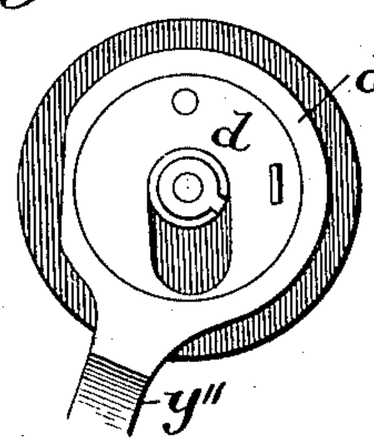
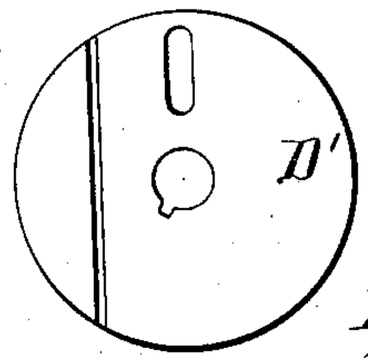


Fig. 17.



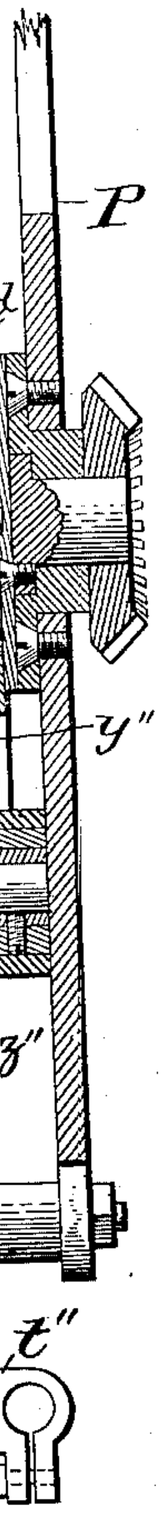


Fig. 14.

Fig. 11.

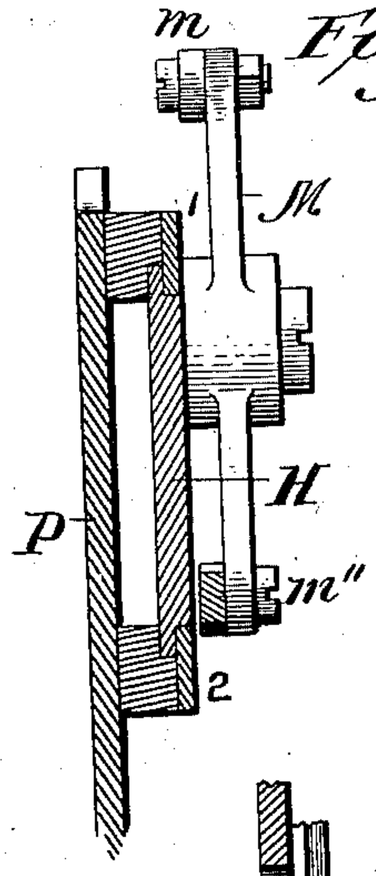


Fig. 12.

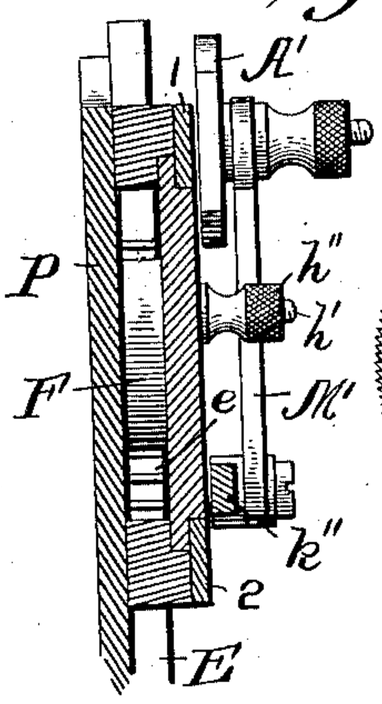


Fig. 7.

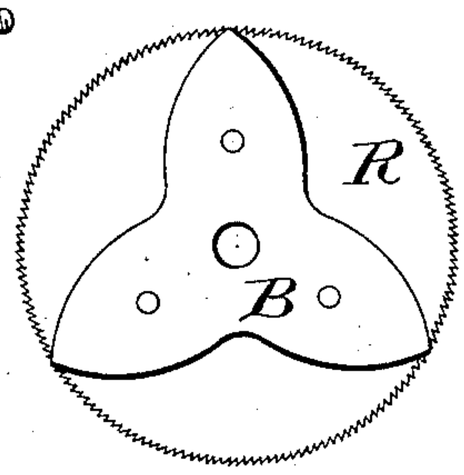


Fig. 15.

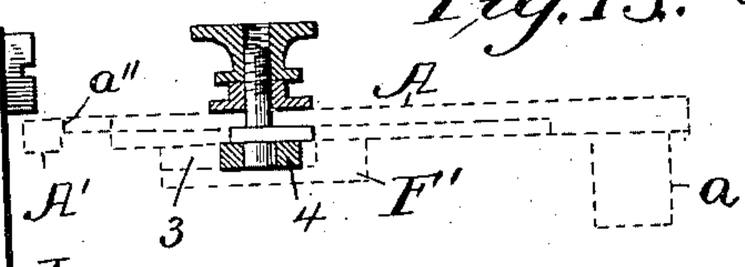


Fig. 13.

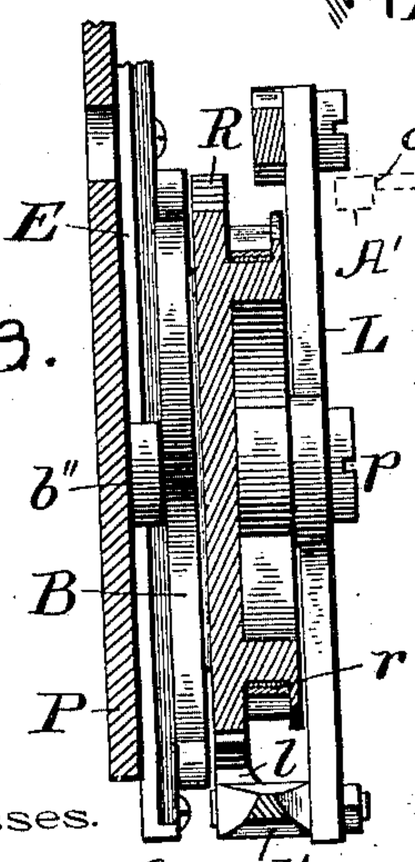


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Fig. 18.

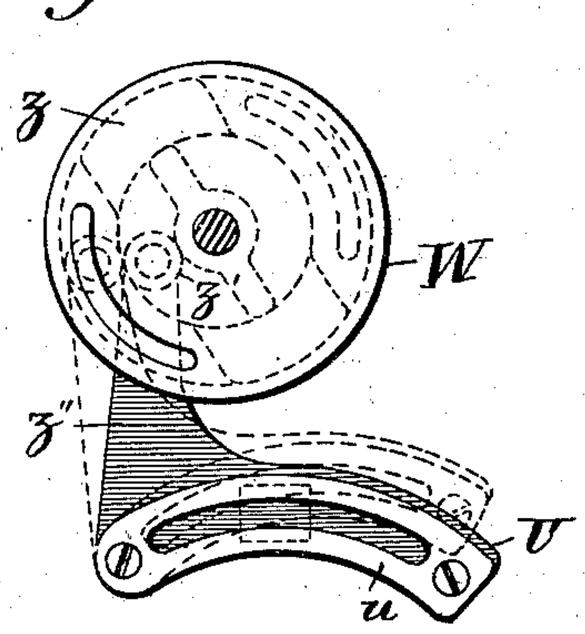


Fig. 9.

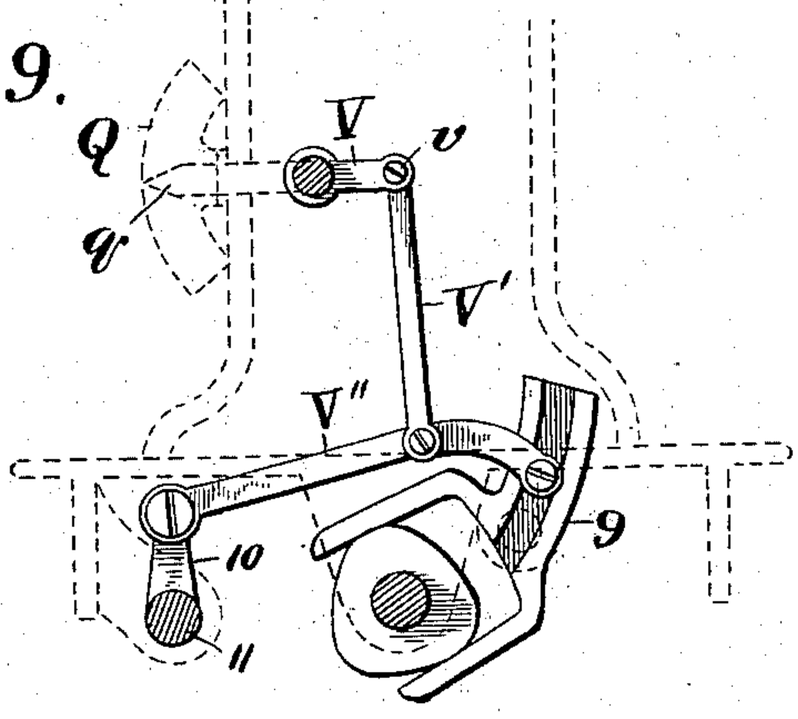
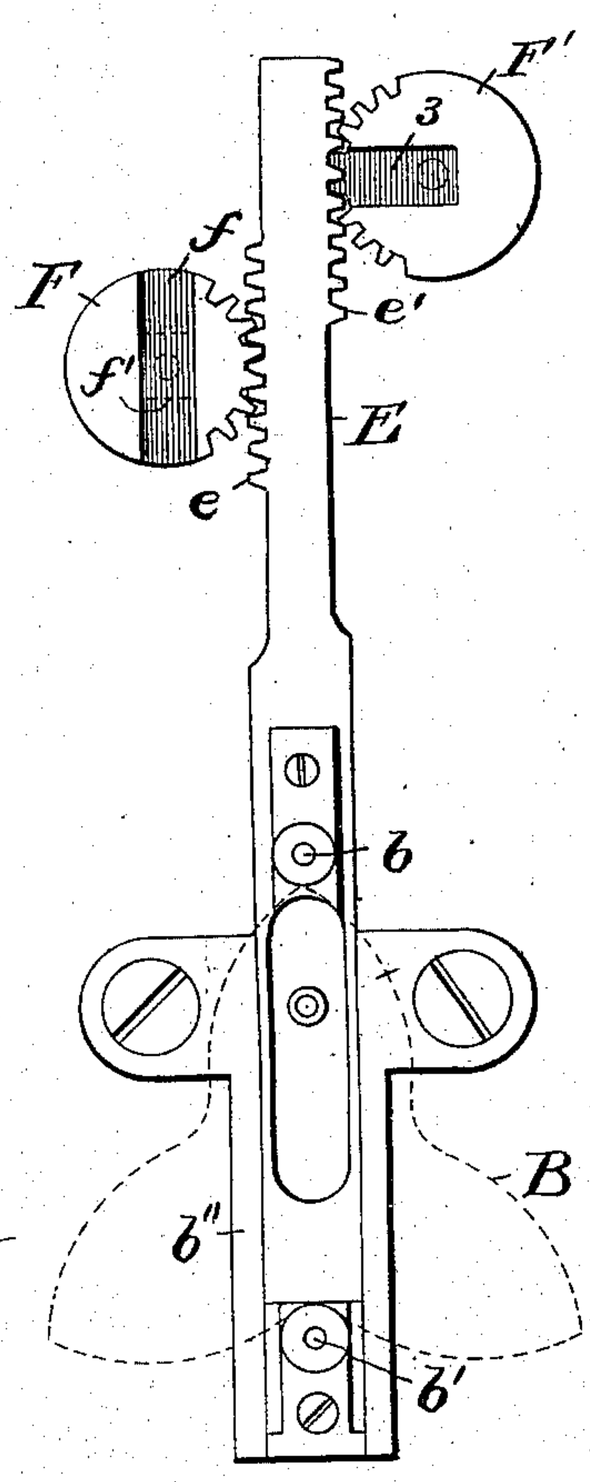


Fig. 8.



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UNITED STATES PATENT OFFICE.

WILLIAM N. PARKES, OF NEW YORK, N. Y.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 652,327, dated June 26, 1900.

Application filed June 22, 1898. Serial No. 684,177. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. PARKES, a citizen of the United States, residing in the borough of Brooklyn, city of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to sewing-machines, and more particularly to those known as "ornamental or variety stitch" machines, although some of the mechanisms embodying the principles within its scope may be used to advantage in other connections.

My main object has been to secure in one simple compact mechanism means for producing a practically-unlimited number of different ornamental and embroidery stitches. To a certain extent my invention is an improvement upon and a modification of the invention made by me and described and claimed in United States Letters Patent No. 592,510.

In nearly all of the machines designed to produce stitches of the character described and known to me there is a vertically-reciprocating needle-bar mounted in a frame adapted to swing laterally. For producing one line or kind of ornamental stitches this frame is moved laterally through the action of a pattern-cam actuated by the shaft of the machine through intermediate gearing, different cams and different gearings being used for producing the different changes in the amount and number of lateral movements of the frame with respect to the vertical movements of the needle-bar, and consequently different kinds of stitches. For produing another line or kind of stitches or increasing the number produced in the manner first stated the action of a pattern-cam upon the feed mechanism of the work is employed, this latter cam being actuated by a shaft of the machine through intermediate gearing. The changes in the feed, in combination with the changes in the lateral movements of the needle-bar produced by the different gears or cams, produce the different effects upon and changes in the stitches. In my invention I also have the needle-bar mounted to move laterally; but instead of using gearing and different cams to produce different lateral movements in the needle with respect to its vertical movements I use one cam actuated by a ratchet-wheel. Simply by the adjustment of the stroke of the pawl of the ratchet-wheel I can produce an unlimited number of different lateral movements with respect to the number of the vertical movements in the needle-bar with the one cam. In a similar manner I control the action of the feed mechanism of the work in combination with the movements of the needle-bar.

To illustrate the practical effect of my invention, I might state that one of the most enterprising manufacturers of sewing-machines known to me now builds thirty-two machines, each having its own particular gearing and cams for the purpose of producing a limited variety of fancy stitches, whereas I can produce with my one mechanism practically all of the stitches made upon the thirty-two machines in question and also a practically-unlimited number of others. In the machines referred to, moreover, the lateral motion of the needle-bar is produced by the action of a cam and cannot be varied without changing the cam. In my device I not only provide proper means for moving the needle-bar laterally, but I also provide means for automatically changing laterally the working position of such lateral movement. By this means I not only am able to produce stitches which are modifications of those produced by gearing and cam-actuated mechanisms, but I am able to produce many other stitches completely outside of the working range of such mechanisms. The broad principles governing the production of such stitches are covered in my Patent No. 592,510, above referred to.

My present invention is a carrying forward of the idea underlying my former device.

The principal novelty in my present invention consists, first, in controlling the lateral movement of the needle and the change in its lateral position through one ratchet-wheel and similarly in automatically moving the regulator of the feed, and consequently controlling the extent of the vibration of the feed-dog and the change in its rate and direction through a second ratchet-wheel actuated

independently of the movement of the first ratchet-wheel, and, secondly, in providing mechanism intermediate these two ratchet-wheels which can be adjusted so as to throw one of them out of engagement during a predetermined number of stitches. It will be seen that with such a device by changing the initial position of one cam with relation to that of the other one series of changes is produced, by changing the strokes of the actuating-pawls in relation to each other a second series of changes is produced, and that by combining these methods of change a very large variety of stitches can be produced irrespective of changes in the working positions of the different mechanical elements of the mechanism.

In the drawings, Figure 1 is a front elevation of a sewing-machine provided with my improved devices. Fig. 2 is a similar but enlarged view of the mechanism for moving the needle-bar laterally and governing the feed mechanism of the work and their connections. Fig. 3 is a similar view of mechanism for intermitting the action of the lever-pawl, showing a change in position of the sectors. Fig. 4 is a central vertical section and partial side elevation of the same with some additional parts. Fig. 5 is a side view of the cam used therein. Fig. 6 is a side view of the disk used therein, showing concealed parts in dotted outline. Fig. 7 is a rear view of the cam and ratchet-wheel for actuating the rack and oscillating segmental gears. Fig. 8 is a front elevation of the said rack and oscillating segmental gear. Fig. 9 is a side elevation and partial section of the mechanism governing the rock-shaft of the feed mechanism. Fig. 10 is a vertical section on the plane of the line 13 13 in Fig. 2, with a side elevation of some of the parts. Fig. 11 is a vertical section on the plane of the line 14 14 in Fig. 2 looking to the left, and Fig. 12 is a similar section on the same plane looking to the right. Fig. 13 is a vertical section on the plane of the line 16 16 in Fig. 2, with a side elevation of some of the parts. Fig. 14 is a vertical section on the plane of the line 17 17 in Fig. 2, with a side elevation of some of the parts. Fig. 15 is a central vertical section through the segmental gear F′ and its shoe. Fig. 16 is a front view of the disk D, showing the eccentric and strap, with the disk D′ removed; and Fig. 17 is a rear view of the disk D′. Fig. 18 is a front view of the cam of the second ratchet-wheel and its bell-crank lever, showing a changed position of the same by dotted lines.

In the drawings, in which the several reference letters and numerals refer to the same parts in all of the figures, S is a sewing-machine of an ordinary type having the usual main shaft and power connections, a reversible feed mechanism, a vertically-reciprocating needle-bar mounted to move laterally, and a complemental stitch-forming mechanism. These features and their adjuncts are well known to persons skilled in the art and require no special or particular description or explanation.

I will first describe the mechanism for moving the needle-bar laterally.

P is a vertical flat plate suitably secured to the frame of the machine and upon which my special mechanism is mounted. At a convenient point on said plate and upon the pivot *p* are mounted several mechanical elements. The first one of these is a lever L, receiving its motion from the link C, with which it is connected at one end and which is itself actuated from the main shaft of the machine through intermediate operative mechanism presently to be described. Upon the other end of said lever L is pivotally mounted a second lever *l*, one end of which terminates in a pawl adapted to engage the teeth on the needle-bar-positioning ratchet-wheel R, mounted on the pivot *p* immediately under the lever L. The other end of said second lever *l′* is formed light and strong and of such shape that, beginning at the fulcrum, its outer periphery lies substantially in a circle having its center at the axis of the pivot *p* when the pawl is out of engagement with the teeth of the ratchet-wheel. A coiled spring *l″*, secured to the pawl and the lever L, is adapted normally to keep the pawl in contact with the teeth of the ratchet-wheel.

On its outer side the ratchet-wheel R is provided with a circular flange *r*, encircling which is a friction-strap *r′*, which is preferably made of a flat piece of metal and which when bent around the flange tends to straighten out. The ends *r″* and *r‴* of the strap are bent outward and are adjustably held in place by a threaded bolt adapted freely to pass through an aperture in one end to a threaded seat on the other. The contact-surface of the strap is preferably lined with leather to increase the friction. The strap is held in place against the forward rotation of the ratchet-wheel by a coiled spring 5, secured to one of its ends and to the plate P, a stop-pin 6, secured to the plate P, keeping the coiled spring 5 stretched sufficiently to draw the ratchet-wheel back when the friction-strap is adjusted tightly enough for the purpose.

On the rear side of the ratchet-wheel R is mounted a suitably-shaped cam B. Back of the cam and actuated by it through rolling contact with friction-rollers on studs *b* and *b′* is mounted in a suitable guide *b″*, secured to the plate P, a vertically-reciprocating bar E, indented on each edge near its upper extremity to form two racks *e* and *e′*, each adapted to mesh with and impart motion to two segmental gears F and F′, suitably pivoted upon the plate P.

The segmental gear F is vertically slotted at *f* and adapted to receive a shoe *f′*, adapted to be adjustably secured to a slide H, slotted vertically at *h*, by means of a threaded stud *h′* and set-screw *h″*. The slide H is mounted

to reciprocate horizontally in guides 1 and 2, secured upon the plate P. Upon the slide H in turn is pivoted a vibrating lever M, which at its upper extremity m is connected to the operating-rod m' of the needle-bar, which it moves laterally, and at its lower extremity m'' is connected through a bar k'' with a vibrating segmental slotted lever K, pivoted at k to the plate P, and which is actuated from the main shaft of the machine through a switch-cam and intermediate operating connections. Supposing the ratchet-wheel R to be rotated in the same direction as the hands of a watch, the cam B will rotate with it. This rotation in turn imparts a vertical reciprocation to the bar E. It is evident that such reciprocation is without effect upon the slide H so long as the shoe f', connecting them, is at the center of oscillation of the segmental gear F. As soon, however, as the shoe f' is moved away from the center along the slot f the oscillation of the gear f will produce a horizontal reciprocation in the slide. Disregarding now any effect produced upon the lever M by the bar k'' and supposing this lever M to be rigidly secured to the slide H, it is evident that the operating-rod m' is reciprocated as the slide H is reciprocated. Furthermore, it is also obvious that any means of imparting a vertical reciprocation to the rack E will accomplish the same purpose as the cam actuated by the ratchet-wheel. I prefer to use the pawl-actuated ratchet-wheel, however, because I can control its motion and intermit it and vary it in such a simple and efficacious manner. These connections are not the only ones, however, which act upon and effect the motion of the operating-rod m' and the needle-bar.

The segmental gear F′ is horizontally slotted at 3 and provided with a shoe 4, adapted to be moved therein and which is secured to a T-shaped lever A, the fulcrum of which is at a, by a screw a''', a slot a' in the lever permitting the adjustment of the extent of the movement imparted to it by the gear F′. The head A′ of the T-lever A is also slotted at a'', and in this is adjustably secured a link M′, which is secured to the bar k'' by any suitable means, as set-screws. It will readily be seen that the farther away from the center of oscillation of the gear F′ the shoe 4 is set the greater will be the vertical movement of the lever A and the farther down the link M′ is placed the greater will be the extent of the longitudinal movement of the bar k''. By means of the sliding connection of the bar k'' in the slot of the segmental lever K the working position of that end of the bar in the slot may be varied at will. By means, then, of this T-lever A and link M′ and their several means of adjustment the extent of the motion of the lever M may be automatically varied and the extent of the lateral vibration of the needle changed, and this, in connection with the change in the working position of the vibrating needle secured by the adjustment of the slide H and the change in the number of these motions with respect to the number of the stitches of the machine and the extent of the movements of the feed, makes it possible to make an unlimited number of changes in the stitches worked by the needle.

The lever-pawl l is moved in and out of engagement with the ratchet-wheel R and an intermittent motion thereby imparted to the latter by means of the second wheel W and its connections. This wheel W is mounted to rotate upon a hub and is actuated by means of a feed-change ratchet-wheel Y, mounted upon the same hub, and to which motion is imparted through a pawl y, mounted upon the end of a vibrating lever y', pivoted upon the same hub and moved by an arm y'', receiving its motion from the eccentric d through the strap d', presently to be described.

In front of the wheel W is mounted a disk w, which is made circularly adjustable by means of set-screws or other suitable means, and this disk in turn is provided in front with radially-adjustable sectors w', suitably slotted and mounted upon the disk by a set-screw or other similar means. As the wheel W rotates, if the sectors are moved outwardly, as shown in Fig. 3, the periphery of such sector is brought into rolling contact with the tailpiece l' of the pawl-lever l. Such contact moves the tailpiece inward and the pawl outward, and consequently throws the latter out of engagement with the ratchet-wheel R while such contact continues. When it ceases, the engagement of the pawl again takes place by the retraction of the spring l'', and such engagement continues until the periphery of the same or another sector acting upon the tailpiece again moves the pawl away from the teeth on the wheel. These sectors are so constructed that when they are moved farthest from the center of the wheel W their outer surfaces lie in a circle of which its center is the center of the wheel W. When they are moved inward, their action on the tailpiece of the pawl ceases. Similarly by decreasing the length of their outer arcs such intermission is decreased. Obviously, therefore, by using a number of sectors of different sizes and by means of the radial and circular adjustment of such as are used a great variety of intermittent motions may be imparted to the ratchet-wheel.

Mounted upon the same hub as the wheel W is a cam Z, provided with a groove z. Engaged in this groove is a roller z', mounted on the end of a bell-crank lever z'', pivoted at z''' upon the plate P to oscillate under the action of the cam Z. The lower member U of this bell-crank lever is provided on its face with a curved slotted guide u, adapted adjustably to hold a shoe retained therein. This shoe is provided with a bolt u'', the outer end of which is threaded and provided with a nut u''', which bolt passes through a ball t, around which a split link T is mounted. By

the tightening of the nut against the ball the shoe is held in any desired position in the slot. This link T is attached at its lower end to a second ball-joint connection t', which is secured to the regulator-shaft of the feed mechanism of the machine by means of the flanged strap t'', so that through the cam Z, bell-crank lever z'', and link T an intermittent rocking motion may be transmitted to the said regulator-shaft. A standard or scale Q, suitably graduated, is mounted upon the frame of the machine, and the pointer q, with which the regulator is provided, measures the adjustment of the amount of action of the cam of the feed-regulator.

The link C is actuated from the main shaft of the machine through an intermediate gear at right angles thereto, and on the outer hub of which is mounted a rotating disk D, next to and almost in contact with the plate P. At its center is an internally-threaded hub, upon the outer extremity of which is mounted by a set-screw an outer disk D'. On the inner side of the disk D' and adjustably mounted upon it by means of the bolt D'' and slot D''' is an eccentric d, which through a strap d' actuates the arm y'', which moves the actuating-pawl of the wheel W. The eccentric being adjustable to and from the center provides means for varying the extent of the throw of such pawl, and thereby controlling the extent of the movement of the wheel. The outer face of the disk D is provided with removable flanged guides dd and da, between which is adjustably secured the end of the link C by means of a threaded bolt db, terminating in a shoe 7, adapted to slide between the guides dd and da and be engaged by the flange thereof. A gage 8, also mounted upon the face of the disk D', enables the operator to set the end of the link C at a predetermined position, so as to feed the ratchet-wheel forward a predetermined number of teeth for each stroke of the pawl l.

In Fig. 9 I have illustrated the means employed for changing the extent of the throw of the feed mechanism and the method of varying its continuity of action and for changing its direction. V is an arm pivoted at v and actuated, as above explained, through the link T and its connections. To the outer end of the arm V is connected a vertical link V', which is connected at its other end to a horizontal link V''. This link V'' has a double motion—viz., a vertically-reciprocating motion, imparted to it by the motion of the link V', and a horizontally-reciprocating motion, imparted to it by the feed rock-shaft lever 9, with which it has an adjustable slot connection. The motion of the link V'' is in turn communicated to the arm 10, and through it to the rock-shaft 11, which it vibrates. All of this mechanism is old and its action well known, except the automatic changes which are made therein. Furthermore, by intermitting the action of the bell-crank lever z'' through the cam Z and varying its extent through the adjusting-slot U a novel and desirable variety of stitches are obtained. It will be noted also that as the fulcrum of the lever V'' is about the middle of the slot in the lever 9 the movement of the end of the link V'' in said slot below said fulcrum reverses the feed, so that if the movement of the lever V is sufficiently great the feed is controlled automatically in relation to such point of reversal.

I have now described the method of actuating the ratchet-wheel R and its cam B and of actuating the ratchet-wheel Y and its cam Z and of changing the speed of each cam with respect to the speed of the machine and of each other.

I will now describe the means for adjusting the initial working position of each cam with respect to the other. To this end I provide a bell-crank lever I, pivoted upon the plate P at i, its lower member being provided at its extremity with a pawl J, held against the teeth of the ratchet-wheel R by means of a spring j, coiled around the pivot j'', the lever I being prevented from moving backward by means of the stop-pin j', secured to the plate P. A spring coiled around the pivot i serves to return the lever I to its initial position after use. The ratchet-wheel R is graduated near its edge. By the mechanism described it may be moved through any desired arc or brought to a stop at any desired tooth. The graduations serve accurately to measure the extent of such movement and to fix the point of such a stop with relation to the pawl l. Consequently, as the position of the ratchet-wheel fixes that of the cam B and as the position of the cam B controls the position of the needle-bar, it will readily be seen that by such means of measured adjustment the initial working position of the cam B can be fixed in relation to the movements of the cam Z or the position of the sectors on the wheel W, or both. For example, if it be desired to move the working position of the needle-bar laterally and simultaneously to reverse the feed action in order to produce a certain kind of stitch the ratchet-wheel would be adjusted until the point of the pawl J is in contact with a tooth opposite a point on the scale indicating that the cam will move the needle-bar laterally in the direction desired at the same time that the cam Z is in the proper position to reverse the feed. To facilitate such adjustment, I provide the wheel W with a pointer w'', whereby the position of the cam Z can be accurately fixed with relation to the graduations of the scale on the wheel R. By such means of measured adjustment I can accurately record the relative positions of the feed-wheel and the cams to reproduce any stitch previously made.

In the machine described it is seen that there is one series of mechanisms acting upon the needle-bar and another series acting upon the feed, and that motion is imparted to each se-

ries from a ratchet-wheel. Consequently it is important to have these two wheels fully under control, especially when the two series of mechanisms are acting in combination. For example, if the wheels are set in certain relative positions to produce a certain stitch they should continue feeding in this same relation if it is desired to continue making the same stitch, for if the relative position of one wheel with respect to the other is changed the stitch is changed. In order that it may be understood how these two ratchet-wheels keep their relative positions, especially when run at a high rate of speed, I will explain how the friction device before mentioned controls them.

The general method now employed to produce friction for the control of an intermittently-moving wheel is through a frictional contact device rigidly placed with respect to the rotation of the wheel. In such device the friction on the wheel is as great at the beginning of the stroke of the actuating-pawl as it is at the end of said stroke. In my device, however, when the actuating-pawl strikes the wheel and commences to carry it forward the friction-strap is carried forward with it. As the motion continues the pull on the holdback-spring increases until the spring is drawn taut enough to overcome the friction between the strap and the wheel, and this relation continues to the end of the stroke, thus securing the maximum amount of friction at the end of the stroke, where it is most efficient, rather than at the beginning, as in former practice. In the use of the ordinary friction device, moreover, as higher rates of speed in the rotation of the wheel are employed the efficiency of the friction device to prevent the wheel from being thrown ahead at the end of the stroke is decreased. With my device when a higher rate of speed is employed the maximum amount of friction is developed earlier in the stroke, and the result is an automatic increase in the efficiency of the controlling action of the device. Also, when the ordinary friction device is used there is at the end of the stroke no tendency to stop it. In my device as soon as the forward motion ceases the force of the pull-back spring brings the wheel back against the stop-pawl, and the tendency to throw ahead is overcome, and the parts are brought into proper relation for the next forward movement. Another advantage results from the yielding nature of the pull-back spring. In ordinary friction devices the maximum amount of resistance to the forward motion of the pawl is met with at the moment when the actuating-pawl strikes the wheel. In my device the minimum amount of resistance is met with at this point.

In the above specification I have described the friction device as applied to a flange upon the wheel R. A similar device is applied to the wheel W and needs no particular description in that connection.

Having described my invention, what I claim as new is—

1. In a sewing-machine the combination of a needle-bar, a needle-bar-positioning wheel, means intermediate the same and the needle-bar to move the needle laterally, means for actuating said wheel, a feed-change wheel, means intermediate the same and the feed mechanism to automatically change the extent of movement of the latter, and means for actuating the said feed-change wheel independent of the movement of the needle-bar-positioning wheel.

2. In a sewing-machine the combination of a needle-bar, a needle-bar-positioning cam, means intermediate the same and the needle-bar to move the needle laterally, means for actuating said cam, a feed-change cam, means intermediate the same and the feed mechanism to automatically change the extent of movement of the latter, means for actuating the said cams, and means for changing the speed of each cam with respect to the other.

3. In a sewing-machine the combination of a needle-bar, a ratchet-wheel, means intermediate the same and the needle-bar to move the needle-bar laterally, an actuating-pawl adapted to engage the ratchet-wheel, a wheel, adjustable means separate from the ratchet-wheel for actuating the same, and means adapted to throw the actuating-pawl of the ratchet-wheel in and out of engagement brought into operation through the movements of the said wheel.

4. In a sewing-machine having a reversible feed mechanism, the combination with an actuating feed-change wheel and the regulator-shaft of the feed mechanism, of means adapted to rock the said regulator-shaft consisting of a lever actuated by the aforesaid actuating feed-change wheel, a link and a ball-joint connection between the same and the lever, a similar connection between the same and an arm on the feed-regulator shaft and means for varying the position of the lever end of said link with relation to the fulcrum of the lever.

5. In a sewing-machine having a reversible feed mechanism, the combination with an actuating feed-change wheel, and the regulator-shaft of the feed mechanism, of means for imparting a rocking movement to the said regulator-shaft and varying the extent of the said movement, consisting of a cam actuated by the said actuating feed-change wheel, a bell-crank lever engaged therewith, a slotted seat in said bell-crank lever, a slide in said seat, a stud projecting from said slide, an arm adjustably mounted on the regulator-shaft of the feed mechanism, a link, a ball-joint connection between one end of said link and the stud projecting from the slide, and a ball-joint connection between the other end of said link, and the arm on said regulator-shaft.

6. The combination in a sewing-machine having a vertically-reciprocating needle-bar

mounted to move laterally and a complemental stitch-forming mechanism, of a slide adapted to reciprocate, and means for reciprocating the same, a lever fulcrumed upon said slide, operative connections between the needle-bar and the lever, and means for actuating the latter.

7. The combination in a sewing-machine having a vertically-reciprocating needle-bar mounted to move laterally and a complemental stitch-forming mechanism, of a slide adapted to reciprocate, means for reciprocating the same, a lever fulcrumed upon said slide, operative connections between the needle-bar and the lever, and means for actuating and automatically changing the extent of motion of the lever.

8. The combination in a sewing-machine, of stitch-forming mechanism and feeding mechanism, means for positioning said stitch-forming mechanism comprising a ratchet-wheel, a pawl constructed to actuate the ratchet-wheel, means for operating the pawl, a disk mounted separately from the said ratchet-wheel, said disk adapted to rotate, means for rotating the same, and one or more sectors carried by the said disk, said sectors adapted to move the pawl in and out of engagement with the ratchet-wheel.

9. The combination in a sewing-machine, of stitch-forming mechanism and feeding mechanism, means for positioning said stitch-forming mechanism comprising a ratchet-wheel, a pawl constructed to actuate the ratchet-wheel, means for operating the pawl, a disk mounted separately from the said ratchet-wheel, said disk adapted to rotate, means for rotating the same, and one or more adjustable sectors carried by and operated through the movements of the disk, said sectors adapted to move the pawl in and out of engagement with the ratchet-wheel.

10. In combination in a sewing-machine, a stitch-forming mechanism, a feeding mechanism, a toothed wheel provided with a scale, an operative connection between the wheel and the stitch-forming mechanism, a second wheel, an operative connection between the said second wheel and the feeding mechanism, means adapted manually to adjust the actuating position of the toothed wheel with respect to the second wheel consisting of a lever, and a pawl mounted on said lever adapted to engage with the toothed wheel.

In witness whereof I have hereunto set my hand, this 21st day of June, 1898, in the presence of two witnesses.

WILLIAM N. PARKES.

Witnesses:
B. M. SCOTT,
HERMAN MEYER.